Heiman

Photoelectric Smoke Alarm User Manual

M419-57Ever1.0

WS2SA-1
HS2SA-1
HM2SA-1W

WS2SA-5
HS2SA-5
HM2SA-5W

PHOTOELECTRIC

IMPORTANT! PLEASE READ CAREFULLY AND SAVE.
This user's manual contains important information about your Smoke Alarm Device's operation. If you are installing this Smoke Alarm Device for use by others, you must leave this manual—or a copy of it—with the end user.

*The pictures shown are for reference only.
*As the technology is constantly updated, if actual operation is inconsistent with the user manual, please refer to the actual operation, and the final interpretation rights is reserved to the manufacturer.

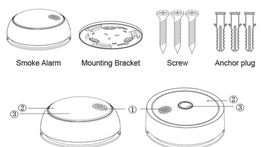
Photoelectric alarms are generally more effective at detecting slow, smoldering fires that smolder for hours before bursting into flame. Sources of these fires may include cigarettes burning in couches or bedding.

Ionization alarms are generally more effective at detecting fast , flaming fires that consume combustible materials rapidly and spread quickly. Sources of these fires may include flammable liquids or paper burning in a waste container.
However, both types of alarms provide adequate detection of both types of fires.
If you desire the earliest detection of both smoldering fires and fast flaming fires, you should install smoke alarm devices that combine both photoelectric and ionization sensing technologies in one unit.

PACKING LIST

PART NAME	QUANTITY
Smoke alarm	1 Piece
Mounting bracket	1 Piece
Manual	1 Piece
Screw	3 Piece
Anchor plug	3 Piece

PACKING LIST



① Buzzer
② LED indicator
③ Test/Hush/Networking button

TECHNICAL PARAMETER

1.Working voltage: DC 3V (1*CR123A / CR17335 Lithium Battery)
2.Visual alarm signal: Red LED indicator
3.Audible alarm sound: ≥85dB/3m
4.Working temperature: 0℃~+40℃
5.Working humidity: ≤95%RH (no condensation)
6.HS2SA-1 / HM2SA-1W / WS2SA-1 dimensions: Φ86 x H34.5mm
HS2SA-5 / HM2SA-5W / WS2SA-5 dimensions: Φ86 x H31mm
7.Mounting: wall mounting or ceiling mounting
8.Battery life: 8 years (HM2SA-1W,HM2SA-5W)
7 years (HS2SA-1,HS2SA-5)
5 years (WS2SA-1,WS2SA-5)

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1. SUPERIOR FEATURES

- Battery Operated
  Replaceable lithium battery helps to lengthen the lifetime of smoke alarm by replacing new battery.
- Operating Light (LED)
  Flashes approximately every 53 seconds confirming unit is powered and working normally.
- Low Battery Warning
  Alarm beeps every 53 seconds when the battery is low.
- Alarm Pause (Hush mode)
  Silence your smoke alarm device by momentarily pressing the test button when non-emergency smoke causes nuisance alarm. The red light flashes every 10 seconds to remind you that the smoke alarm device has been silenced.The alarm will automatically be reset after 10 minutes. Local hush function and remote hush function are both available.
- Test function
  Press the test button periodically to check and confirm the alarm device is working normally.

- Audible and visible alarm signals
  When detected smoke reaches alarm threshold of the smoke alarm, red light will flash quickly and the buzzer will issue loud and quick beeps sounds.
- Easy Installation
  Fixings supplied.

2.IMPORTANT SAFETY INFORMATION

WARNING!

PLEASE READ AND SAVE THESE INSTRUCTIONS.

- **DO NOT remove or disconnect battery to quiet unwanted alarms.** This will remove your protection. Open windows or fan the air around smoke alarm device to silence it.
- The test button accurately tests all smoke alarm device functions. **DO NOT** use any other test method. Test smoke alarm device weekly to ensure proper operation.
- This smoke alarm device should be installed only by a licensed, qualified electrician. Observe and follow all local and national electrical and building codes for installation.

- This smoke alarm device IS **NOT** designed to be the **PRIMARY** protection for buildings that require complete fire alarm systems. Buildings of this type include hotels, motels, dormitories, hospitals, nursing homes, and group homes. This is true even if they were once single family homes. However, this smoke alarm device MAY be used inside individual rooms as **SUPPLEMENTAL** protection.
- Install a smoke alarm device in every room and on every level of the home. Smoke may not reach the smoke alarm device for many reasons. For example, if a fire starts in a remote part of the home, on another level, in a chimney, wall, roof, or on the other side of a closed door, smoke may not reach the smoke alarm device in time to alert household members. A smoke alarm device will not promptly detect a fire **EXCEPT** in the area or room in which it is installed.
- Smoke alarm devices may not alert every household member every time. The alarm horn is loud in order to alert individuals to a potential danger. However, there may be limiting circumstances where a household member may not hear the alarm (i.e., outdoor or indoor noise, sound sleepers, drug or alcohol usage, the hard of hearing, etc.).

If you suspect that this smoke alarm device may not alert a household member, install and maintain specialty smoke alarm devices. Household members must hear the alarm's warning sound and quickly respond to it to reduce the risk of damage, injury, or death that may result from fire. If a household member is hard of hearing, install special smoke alarm devices with lights or vibrating devices to alert occupants.

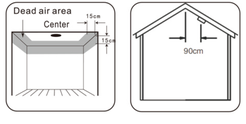
- Smoke alarm devices can sound their alarms only when they detect smoke. Smoke alarm devices detect combustion particles in the air. They do not sense heat, flame, or gas. This smoke alarm device is designed to give audible warning of a developing fire. However, many fires are fast-burning, explosive, or intentional. Others are caused by carelessness or safety hazards. Smoke may not reach the smoke alarm device **QUICKLY ENOUGH** to ensure safe escape.
- Smoke alarm devices have limitations. This smoke alarm device is not foolproof and is not warranted to protect lives or property from fire. Smoke alarm devices are not a substitute for insurance. Homeowners and renters should insure their lives and property. In addition, it is possible for the smoke alarm device to fail at any time. For this reason, you must test the smoke alarm device weekly and replace every 10 years.

3. WHERE TO LOCATE

3.1 As a minimum, smoke alarm devices should be located between sleeping areas and potential sources of fire such as living rooms and kitchens. In single story homes with one sleeping area, a smoke alarm device should be installed in the hallway, as close as possible to the living accommodation. To ensure audibility in bedrooms, no smoke alarm device should be further away than 3m from any bedroom door. It may be necessary to install more than one smoke alarm device, particularly the hallway is more than 15m long. In single story homes with two separate sleeping areas, a minimum of two smoke alarm devices are required, one outside each sleeping area. In multilevel or split level homes, as a minimum a smoke alarm device should be installed on the ground floor between the staircase and any rooms in which a fire might start and on each story in circulation areas which form part of escape route (normally hallways and landings).

3.2 Additional alarms should be installed in bedrooms in anticipation of fires originating here, caused by faulty wiring, lights, appliances, smokers or other hazards.
3.3 For best protection, smoke alarm devices should be installed in every room in your home, apart from those listed in the Section **4 LOCATIONS TO AVOID**. Heat alarms should be used in kitchens, boiler rooms, laundry rooms, garages and such like, where smoke alarm devices would be unsuitable.
3.4 Install smoke alarm devices in circulation areas at a distance no greater than 7.5m from the farthest wall, no greater than 7.5m from a door to any room in which a fire might start and no greater than 7.5m from the next smoke alarm device.
3.5 As it is impossible to predict the source of a fire, the best location for an alarm is usually the center of a room or hallway. If it is necessary to place a smoke alarm device on a wall, always locate the detection element of the alarm 150mm to 300mm (6 to 12 inches) below the ceiling and the bottom of the alarm above the level of doors and other openings.

3.6 In rooms with simple sloped, peaked or gabled ceilings, install smoke alarm devices on the ceiling 900mm (3 feet) from the highest point of the ceiling. "Dead air" at the peak of a ceiling may prevent the smoke from reaching the alarm in time to provide an early warning.

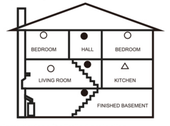


3.7 Read Section 4 **LOCATIONS TO AVOID and Section 13 LIMITATIONS OF SMOKE ALARM DEVICES** in this manual .

Single Story,
one sleeping area

Single Story,
more than one sleeping areas

Two Story dwelling



● Smoke alarm devices for limited protection
○ Additional smoke alarm devices for better coverage
△ Heat alarms

IMPORTANT:
These alarms are intended to primarily for single-occupancy private dwellings. For use in other applications the manufacturer's advice must be sought.

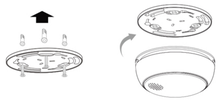
4. LOCATIONS TO AVOID

DO NOT locate smoke alarm devices :
4.1 In turbulent air from fans, heaters, doors, windows,etc., which could draw smoke away from the alarm.
4.2 In high humidity area such as bathrooms and shower rooms, or where the temperature exceeds 39℃ (100℉) or falls below 5℃ (40℉), as high humidity can trigger nuisance alarm.
4.3 At the peal of an "A" frame ceiling. "Dead air" at the top may prevent smoke from reaching the alarm in time to provide early warning.
4.4 Less than 300mm(12inches)from the wall when mounted on the ceiling.
4.5 In insect-infested areas.Tiny insects may affect performance.
4.6 In kitchens, boiler rooms, laundry rooms, garages. Combustion particles from cooking or car exhaust and dust and moisture could trigger a nuisance alarm.
4.7 In very dusty or dirty areas. Dirt and dust can build up and impair performance.
4.8 Within 300mm (12inches) of light fittings or room corners.

4.9 In locations which would make routine testing or maintenance hazardous (e.g.over a stairwell).
4.10 On poorly insulated walls or ceilings.
4.11 Near objects such as ceiling decorations which might impede the path of smoke to the alarm.
4.12 Within 1500mm (5feet) of fluorescent light fittings.

5. HOW TO INSTALL

5.1 Power on the smoke alarm firstly, press and hold the test button for about 3 seconds, confirm that the red light flashes rapidly, and the buzzer sounds a rapid "DI-DI-DI" sound;
5.2 Select a proper install location, punch holes on the installation surface with a drill;
5.3 Insert anchor plugs into drilled holes;
5.4 Secure the mounting bracket with screws;



5.5 Rotate the smoke alarm into the mounting bracket and hear the "click" sound to indicate that the installation is in place.

5.6 Test the smoke alarm device . See Section 8 **TESTING THE SMOKE ALARM DEVICE.**

6.VISIBLE AND AUDIBLE INDICATIONS

CONDITION	LED	HORN
Normal Operation	Red LED flashes once every 53 seconds.	None
Test Condition	Red LED flashes rapidly.	Short quick beeps
Alarm Condition	Red LED flashes rapidly.	Short quick beeps
Low Battery	Red LED flashes every 53 seconds.	One beep every 53 seconds
Malfunction	Red LED flashes twice every 53 seconds.	None
Local Hush for alarm condition	Red LED flashes once every 10 seconds.	None(Duration: about 10 minutes)
Local Hush for low battery alarm	Red LED flashes once every 53 seconds.	None(Duration: about 12 hours)
Remote Hush for alarm condition	Red LED flashes once every 10 seconds.	None(Duration: about 10 minutes)

Attention: If remote silencing function is available, any remote silencing feature shall only be used in line of sight of the smoke alarm.

7. FALSE ALARM CONTROL

The alarm features a False Alarm Control that, when activated, unwanted alarms will be silenced for up to 10 minutes.

How to activate the False Alarm Control:
Press and release the test button during an unwanted alarm to silence the alarm horn. This means the smoke alarm device is in False Alarm Control.

If the smoke alarm device does not go into False Alarm Control and continues to sound its loud alarm horn or if it initially goes into False Alarm Control then resounds the alarm, the smoke is too heavy and could be a possibly dangerous situation— take emergency action.

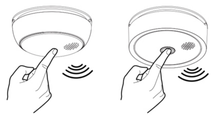
8. TESTING THE SMOKE ALARM DEVICE

WARNING!

Test each smoke alarm device to be sure it is installed correctly and operating properly.

- The test button accurately tests all functions. DO NOT use an open flame to test this smoke alarm device. You may ignite and damage the smoke alarm device or your home.
- Test smoke alarm devices weekly and upon returning from vacation or when no one has been in the household for several days.
- Stand at arm's length from the smoke alarm device when testing. The alarm horn is loud to alert you to an emergency and can be harmful to hearing.

8.1 Press and release the test button to test the alarm. The alarm will sound loud short beeps. The alarm may stop sounding once releasing the test button.
8.2 If smoke alarm device does not sound, check whether the alarm is properly attached to the mounting bracket.

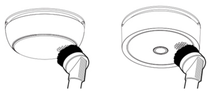


NOTE: REPLACE THE ALARM IF THE TEST FUNCTION DOES NOT OPERATE PROPERLY AFTER FOLLOWING THE PROCEDURES OUTLINED ABOVE.
DANGER: If alarm horn sounds, and smoke alarm device is not being tested, the smoke alarm device is sensing smoke.

THE SOUND OF THE ALARM HORN REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.

9. MAINTENANCE AND CLEANING

This unit has been designed to be as maintenance-free as possible, but there are a few simple things you must do to keep it working properly:
9.1 Test it at least once a week.
9.2 Clean the smoke alarm device at least once a month; gently clean the outside of the smoke alarm device with your household soft brush. Remember to test the smoke alarm after cleaning. It's forbidden to clean with water, cleaners or solvents as they may damage the device. Never use water, cleaners or solvents since they may damage the unit.



9.3 If the smoke alarm device becomes contaminated by excessive dirt, dust and/or grime, and cannot be cleaned to avoid unwanted alarms, replace the unit immediately.
9.4 Relocate the unit if it sounds frequent unwanted alarms. See Section **4 LOCATIONS TO AVOID** for details.
9.5 When the battery back-up becomes weak, the smoke alarm device will sound one beep every 53 seconds (the low battery warning). You should replace the alarm immediately to continue your protection.

10. PRACTICE FIRE SAFETY

If the smoke alarm device sounds its alarm horn, and you have not pushed the test button, it is warning of a dangerous situation. Your immediate response is necessary. To prepare for such occurrences, develop family escape plans, discuss them with ALL household members, and practice them regularly.
10.1 Expose everyone to the sound of a smoke alarm device and explain what the sound means.
10.2 Determine TWO exits from each room and an escape route to the outside from each exit.
10.3 Teach all household members to touch the door and use an alternate exit if the door is hot. **INSTRUCT THEM NOT TO OPEN THE DOOR IF THE DOOR IS HOT.**
10.4 Teach household members to crawl along the floor to stay below dangerous smoke, fumes, and gases.
10.5 Determine a safe meeting place for all members outside the building.

11. WHAT TO DO IN CASE OF A FIRE

11.1 Don't panic; stay calm.
11.2 Leave the building as quickly as possible. Touch doors to feel if they are hot before opening them. Use an alternate exit if necessary. Crawl along the floor, and **DO NOT** stop to collect anything.
11.3 Meet at a pre-arranged meeting place outside the building.
11.4 Call the fire department from **OUTSIDE** the building.
11.5 **DO NOT GO BACK INSIDE A BURNING BUILDING.** Wait for the fire department to arrive.

NOTE: These guidelines will assist you in the event of a fire. However, to reduce the chance that fires will start, practice fire safety rules and prevent hazardous situations.

12. TROUBLESHOOTING

PROBLEM	SOLUTION
Smoke alarm device does not respond.	Please check whether the alarm is properly attached to the mounting bracket.
Red LED flashes and the alarm sounds one beep every 53 seconds.	Battery is low- REPLACE THE BATTERY OR THE ALARM
Red LED flashes twice every 53 seconds.	The alarm is malfunctioning. Please clean your smoke alarm device. OR REPLACE TO A NEW SMOKE ALARM IMMEDIATELY!
Smoke alarm device sounds unwanted alarms intermittently or when residents are cooking, taking showers, etc.	1.Clean smoke alarm device. See Section 9 MAINTENANCE AND CLEANING. 2.Hire an electrician to move smoke alarm device to a new location. See Section 3 WHERE TO LOCATE.

13. LIMITATIONS OF SMOKE ALARM DEVICES

Smoke Alarm Devices have played a key role in reducing deaths resulting from home fires worldwide. However, like any warning device, Smoke Alarm Devices can only work if they are properly located, installed, and maintained, and if smoke reaches the Alarms. They are not foolproof.

13.1 Smoke alarm devices cannot work without power.
Battery operated units cannot work if the batteries are missing, disconnected or dead,if the wrong type of batteries are used, or if the batteries are not installed correctly. AC units cannot work if the AC power is cut off for any reason (open fuse or circuit breaker, failure along a power line or at a power station, electrical fire that burns the electrical wires, etc.).If you are concerned about the limitations of battery or AC power, install both types of units.

13.2 Smoke alarm devices may not waken all individuals.
Practice the escape plan at least twice a year, making sure that everyone is involved – from kids to grandparents. Allow children to master fire escape planning and practice before holding a fire drill at night when they are sleeping. If children or others do not readily waken to the sound of the smoke alarm device, or if there are infants or family members with mobility limitations, make sure that someone is assigned to assist them in fire drill and in the event of an emergency. It is recommended that you hold a fire drill while family members are sleeping in order to determine their response to the sound of the smoke alarm device while sleeping and to determine whether they may need assistance in the event of an emergency.

13.3 Smoke alarm devices are not foolproof.
Like any electronic device, smoke alarm devices are made of components that can wear out or fail at any time. You must test the unit weekly to ensure your continued protection. Smoke alarm devices cannot prevent or extinguish fires. They are not a substitute for property or life insurance.

13.4 Smoke alarm devices cannot detect fires if the smoke does not reach the alarms.
Smoke from fires in chimneys or walls, on roofs, or on the other side of closed doors may not reach the sensing chamber and set off the Alarm. That is why one unit should be installed inside each bedroom or sleeping area—especially if bedroom or sleeping area doors are closed at night—and in the hallway between them.

13.5 Smoke alarm devices may not be heard.
Though the alarm horn in this unit meets or exceeds current standards, it may not be heard if: 1) the unit is located outside a closed or partially closed door, 2) residents recently consumed alcohol or drugs, 3) the alarm is drowned out by noise from stereo, TV, traffic, air conditioner or other appliances, 4) residents are hearing impaired or sound sleepers. Special purpose units, like those with visual and audible alarms, should be installed for hearing impaired residents.

13.6 Smoke alarm devices may not detect fire on another floor or area of the dwelling.
For example, a stand-alone unit on the second floor may not detect smoke from a basement fire until the fire spreads. This may not give you enough time to escape safely. That is why recommended minimum protection is at least one unit in every sleeping area, and every bedroom on every level of your dwelling. Even with a unit on every floor, stand-alone units may not provide as much protection as interconnected units, especially if the fire starts in a remote area. Some safety experts recommend installing interconnected AC powered units with battery back-up (see " About Smoke Alarm Devices ") or professional fire detection systems, so if one unit senses smoke, all units alarm. Interconnected units may provide earlier warning than stand-alone units since all units alarm when one detects smoke.

13.7 Smoke alarm devices may not have time to alarm before the fire itself causes damage, injury, or death, since smoke from some fires may not reach the unit immediately.Examples of this include persons smoking in bed, children playing with matches, or fires caused by violent explosions resulting from escaping gas.

13.8 Smoke alarm devices have a limited life.
The unit should be replaced immediately if it is not operating properly. You should always replace a smoke alarm device after 10 years from date of purchase. Write the purchase date on the space provided on back of unit.